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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/387,443	
	Filing Date	September 1, 1999	
	First Named Inventor	William Kopaciewicz	
	Group Art Unit	1723	
	Examiner Name	Fortuna, A.	
Total Number of Pages in This Submission	5	Attorney Docket Number	550P002Cont.2

ENCLOSURES (check all that apply)		
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#14 Response  
3/13/03  
J. Butth

Applicant : William Kopaciewicz, et al.  
Serial No. : 09/387,443  
Filed : September 1, 1999  
For : CAST MEMBRANE STRUCTURES FOR SAMPLE PREPARATION  
Examiner : Fortuna, A.  
Art Unit : 1723  
Attorney :  
Docket No. : 550P002Cont.2  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231  
Sir:

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Kevin S. Lemack  
Name of applicant, assignee, or Registered Representative

[Signature]  
Signature  
February 27, 2003  
Date

**REMARKS**

The Office Action dated November 27, 2002 has been received and carefully studied.

The Examiner newly rejects claims 1, 2, 6-9, 11, 12, 16-18 under 35 U.S.C. §102(b) as being anticipated by Nochumson et al. The Examiner states that Nochumson discloses a filtration device including a container containing a structure comprising a plurality of sorptive particles bound to a polymer adhered to the interior wall.

The rejection is respectfully traversed.

Nochumson et al. disclose a centrifuge tube containing a porous selection means for selectively separating and recovering biological substances. The porous selection means is formed by forming a composition comprising a mixture of a polymeric resin and organic or inorganic particles, a solvent and a non-solvent. The composition is extruded or molded and passed through an extraction

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medium, which is then removed. A flat sheet membrane is thus formed having integrally bound particulate distributed throughout the membrane.

However, Nochumson et al. do not disclose or suggest that the thus formed membrane is in any way adhered to a wall of the housing as required by the instant claims. In fact, Nochumson et al. disclose removal of the membrane from the tube, thereby teaching away from the present invention as claimed:

"The membrane or like means with the bound biological substance is then removed and washed to remove any remaining liquefied gel or other non-bound materials. The DNA or DNA fragments remaining in the membrane are then eluted in a known manner. To facilitate this embodiment, the membrane preferably is removable from the centrifuge tube, although it would be possible for the closed, i.e., bottom, end of the tube to be opened to remove the filtrate and afford a flow-through passage to facilitate washing of the membrane in a similar manner to that disclosed in U.S. Pat. No. 3,732,981, which is incorporated herein by reference. In a particularly preferred embodiment, the centrifuge tube comprises a two-section tube comprising a separable upper container in which the selection means is mounted, (although it also is possible for this element itself to be removable from an otherwise integral tube) and a lower container for collecting the filtrate."

Column 5, lines 26-43. Even in the embodiment where the membrane is not removable, Nochumson et al. nowhere disclose or suggest that the membrane is adhered to an interior wall. Indeed, in a typical centrifugal tube construction, the Nochumson et al. membrane is likely mechanically sealed on the bottom 23 of the container 20, such as with an O-ring. This is not adhesion.

With particular reference to claims 2 and 12, Nochumson et al. do not disclose or suggest a housing with spaced open ends and the structure contiguous with one of the open ends. The membrane 21 of Nochumson is positioned well above the end 31 of the container 20.

The Examiner also rejects claims 1-5, 11, 12, 14 and 15 under 35 U.S.C. §102(b) as being anticipated by White. The Examiner states that White discloses a housing having the claimed

configuration and having a structure comprising sorptive particles bound to a polymer adhered to an interior wall. The Examiner cites column 2, lines 46-50 as disclosing that the plug is physically attached (adhered) to the inner wall of the housing.

The rejection is respectfully traversed.

The passage cited by the Examiner states that in a preferred embodiment the plug member is not physically attached to the inner wall by any adhesive material, but is force fitted:

"In the preferred embodiment of the invention the plug member is not physically attached to the inner wall of the tube by any adhesive material, but is force fitted into the tube under pressure so that it will not move and forms a frictional seal with the inner wall of the tube."

This is elaborated on in column 3, lines 48-60, where it is states that the plug is preferably force or pressure fitted securely into the tube so that it is securely held and frictionally sealed against the inner wall of the tube although not physically attached to the inner wall by any adhesive or other extraneous material:

"The plug member is preferably force or pressure fitted securely into tube 12, under a pressure of the order of 1800 lb, so that it is securely held and frictionally sealed against the inner wall of tube 12 although not physically attached to the inner wall by any adhesive or other extraneous material. The plug member has a tapering, frusto-conical shape of dimensions matching that of the tube 12 at a predetermined location intermediate its ends, so that the plug member will be compressed as it is forced into the tube and released at the desired position to seal against the inner wall of the tube and define a liquid sample chamber 20 of predetermined dimensions."

Thus, White clearly teaches force fitting the plug member and expressly avoids using any adhesive.


With particular reference to claims 2 and 12, White expressly teaches that the plug member is intermediate the top and bottom openings of the housing, which is completely contrary to the language of these claims.

The Examiner rejects claims 3, 10 and 13 under 35 U.S.C. §103(a) as being unpatentable over Nochumson et al. in view of Hagen or Hilderbrandt. Hagen is cited for its disclosure of a composite filter containing derivitized silica, and Hilderbrandt is cited for its disclosure of a composite membrane filled with sorptive particles wherein the polymer can be polysulfone and the particles Aerosil 200.

Claims 3, 10 and 13 are believed to be allowable by virtue of their dependence, for the reasons provided above.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

  
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